Corentium Home
by Airthings

SPECIFICATIONS

Radon sampling method:	Passive radon diffusion chamber
Radon detection method:	Alpha spectrometry using digital detector technology.

Sensitivity: (at 100 Bq/m³)

7 day and long-term measurement	~ 0,3 counts / hour
1 day measurement	~ 2 counts / hour

Precision (at 100 Bq/m³):

Short-term (7 days)	20 % after 1 week
Long-term	10 % after 1 month

Accuracy:	< 5 % ± 5 Bq/m³
Power supply:	3 LR03 (AAA alkaline battery) 3 years battery life-time
Power consumption:	< 250 µW
Dimensions:	120 mm × 69 mm × 22.5 mm
Weight:	130 grams (incl. batteries)
Operation environment:	Temperature: 0 °C to +40 °C Relative Humidity < 95 %
Measurement range:	Detection range: 0 – 50.000 Bq/m³ Upper display limit: 9.999 Bq/m³

Corentium Pro
by Airthings

Weighing just 320 grams, you'll find this radon monitor a joy to work with. The data, captured using four highly accurate silicon photodiodes, is seamlessly transferred to your smartphone or PC.

- Radon data by the hour, 1-day, 7-day, and long-term averages
- Bluetooth
- iOS and Android app
- Suitcase
- Equipped with sensors for temperature, humidity, atmospheric pressure, and tilt
- Includes user-friendly and excel compatible software for analysis and reporting
- Work/time exposure calculation shows what parts of the day levels are high
- Stores up to 5 years of data at 1-hour resolution
- Micro USB cable
- Powered by 3AA batteries
- 2 year battery life
- Calibration certificate

Corentium Plus
by Airthings

Built with multiple state-of-the-art sensors, the Corentium Plus will record everything you'll need to view fluctuations in radon concentration by the hour. The device comes with user-friendly and Excel compatible software, allowing you to upload data to your PC.

- LCD screen shows 1-day and 7-day averages, updated hourly, and long term averages over the period of up to one year
- Equipped with sensors for temperature, humidity, atmospheric pressure, and tilt
- Ability to turn the display off during measurement
- Stores up to 10 years of data at 1-hour resolution
- Upload to PC with a micro-USB cable
- Includes user-friendly and Excel-compatible software for analysis and reporting
- Work/time exposure calculation shows what parts of the day levels are high
- Powered by 3AAA batteries
- 2 year battery life

Corentium Home
by Airthings

A simple but powerful radon monitor. It provides exactly what homeowners need to stay on top of the radon levels – no more, no less. Corentium Home adapts to its environment and eliminates inaccuracies. That is why it is the most accurate radon detector in its category. Designed for durability and efficiency, the batteries will keep Corentium Home monitoring for two years monitoring the air and protecting your health.

- LCD screen shows 1-day and 7-day averages, updated hourly, and long term averages over the period of up to one year
- Buttons for reset and number of days measured
- Powered by 3AAA batteries
- 2 year battery life
- Free web based reporting

Corentium specifications	Corentium Pro by Airthings	Corentium Plus by Airthings	Corentium Home by Airthings
Airthings product no	236	240	224
Sampling method	Passive radon diffusion chamber	Passive radon diffusion chamber	Passive radon diffusion chamber
Detection method	Alpha spectrometry	Alpha spectrometry	Alpha spectrometry
Dimensions	140 x 140 x 30 mm	120 x 69 x 25.5 mm	120 x 69 x 25.5 mm
Weight (incl. batteries)	323 grams	130 grams	130 grams
Power Supply	3 AA alkaline batteries (LR06)	3 AAA alkaline batteries (LR03)	3 AAA alkaline batteries (LR03)
Battery life-time	~ 2 years	~ 2 years	~ 2 years
Internal memory storage capacity	5 years at 1h time resolution	10 years at 1h time resolution	
Hardware			
Display	√ via app	√	√
Battery powered	√	√	√
Hourly reading	√	√	
Memory storage	√	√	
Sensors			
Radon	√	√	√
Temperature	√	√	
Humidity	√	√	
Pressure	√	√	
Tilt and Accelerator	√	√	
Software			
iOS app	√		
Android app	√		
Customizable report	√	√	
CRA Readout Software	√	√	
Web report			√
Connectivity			
USB	√	√	
Wireless	√		
Measurement uncertainty (stat.)			
After 1 day	Std dev < 7% +5 Bq/m^3		
After 7 days	Std dev < 5% +2 Bq/m^3	Std dev < 12% at 50 - 350 Bq/m^3 Std dev <8% at >350 Bq/m^3	Std dev < 20% at 100 Bq/m^3
After 1 month		Std dev < 9% at 90 - 220 Bq/m^3 Std dev < 6% at >220 Bq/m^3	Std dev < 10% at 100 Bq/m^3
Measurement range			
Instrument	0 – 100000 Bq/m^3	0 – 50000 Bq/m^3	
Lower detection limit			0 Bq/m^3
Upper display limit	100000 Bq/m^3 (via app)	9999 Bq/m^3	9999 Bq/m^3
Diffusion time constant	25 minutes	25 minutes	25 minutes
Operation environment			
Temperature	4°C to 40°C	4°C to 40°C	4°C to 40°C
Humidity	<85% RH	<85% RH	<85% RH
Temperature sensor			
Range	4 °C to 40 °C	4 °C to 40 °C	
Resolution	0.336 °C	0.336 °C	
Accuracy	±0.5 °C (typical) ±1 °C (max)	±0.5 °C (typical) ±1 °C (max)	
Humidity sensor			
Range (non-condensing)	5 %RH to 85 %RH	5 %RH to 85 %RH	
Resolution	0.5 %RH	0.5 %RH	
Accuracy (in range 20-80 %RH)	±4.5 %	±4.5 %	
Barometric pressure sensor			
Range	50.0 kPa to 115.0 kPa	50.0 kPa to 115.0 kPa	
Resolution	0.06 kPa	0.06 kPa	
Accuracy	±1 kPa	±1 kPa	